Message

From: Messina, Edward [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=95521FBF4E34496A879E364FAF7E5AA8-MESSINA, EDWARD]
Sent: 11/18/2020 1:38:29 AM
To: Barmakian, Nancy [Barmakian.Nancy@epa.gov]
Subject: RE: Study: Crops contaminated with PFAS can pose health danger

Thanks.

Ed Messina, Esq.
Acting Office Director
Office of Pesticide Programs
Office of Chemical Safety & Pollution Prevention
U.S. Environmental Protection Agency
Washington, D.C.
p: (703) 347-0209

From: Barmakian, Nancy <Barmakian.Nancy@epa.gov>
Sent: Tuesday, November 17, 2020 6:41 PM
To: Messina, Edward <Messina.Edward@epa.gov>
Subject: Re: Study: Crops contaminated with PFAS can pose health danger

Thanks for passing on Ed. Nice job on presentations today. Very informative.

Sent from my iPhone

> On Nov 17, 2020, at 5:29 PM, Messina, Edward <Messina.Edward@epa.gov> wrote:
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> Just fyi
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> Ed Messina, Esq.
> Acting Office Director
> Office of Pesticide Programs
> Office of Chemical Safety & Pollution Prevention
> U.S. Environmental Protection Agency
> Washington, D.C.
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> **From:** Dennis, Allison <Dennis.Allison@epa.gov>
> **Sent:** Tuesday, November 17, 2020 3:01 PM
> **To:** Keigwin, Richard <Keigwin.Richard@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Goodis, Michael <Goodis.Michael@epa.gov>; Siedschlag, Gregory <Siedschlag.Gregory@epa.gov>; Ozmen, Shamus <Ozmen.Shamus@epa.gov>; Dunton, Cheryl <Dunton.Cheryl@epa.gov>; Henry, Tala

<Henry.Tala@epa.gov>; Dunn, Alexandra <dunn.alexandra@epa.gov>; Bolen, Derrick <bolen.derrick@epa.gov>; Fischer, David <Fischer.David@epa.gov>
Subject: FW: Study: Crops contaminated with PFAS can pose health danger

fyi

From: POLITICO Pro <alert@email.politicopro.com>
Sent: Tuesday, November 17, 2020 2:09 PM
To: Dennis, Allison <Dennis.Allison@epa.gov>
Subject: Study: Crops contaminated with PFAS can pose health danger

Study: Crops contaminated with PFAS can pose health danger

By Annie Snider

11/17/2020 02:07 PM EST

Crops irrigated with water that is contaminated with high levels of toxic "forever chemicals" could pose a significant health risk, according to new scientific research released on Tuesday.

The findings from Colorado School of Mines researchers come amid growing questions about the safety of food supplies containing the toxic chemicals, which have been linked with cancer and other ailments. The research poses potential policy implications for the Defense Department, which has pushed back on efforts to require cleanup of agricultural water supplies that were contaminated by its use of PFAS, as well as regulators at FDA and EPA.

What the researchers found: For the paper, which was published in the journal, *Environmental Science and Technology,* environmental Engineer Christopher Higgins and graduate student Juliane Brown took existing knowledge about the rate at which lettuce and other crops take up chemicals in the water that they are irrigated with and ran statistical models to determine whether these crops would contain concentrations of PFAS high enough to pose a health risk to the people who eat them as part of a normal diet.

They found that if the irrigation water is below EPA's recommended safety limit for PFOA and PFOS, the crops will not pose an added health risk.

But, in many cases, farmers, ranchers and backyard gardeners irrigate their plants and livestock with water that is not treated for potable use. So, the researchers ran a second set of models to determine at what level of contamination irrigated crops could start posing a significant health risk.

The results depended upon how dangerous they assumed the chemicals to be. Some states have adopted "reference doses" that are far lower than the one EPA has adopted. But even using EPA's approach, the researchers found that contamination levels similar to what has been found in groundwater near military bases and chemical manufacturing facilities could transfer the chemicals to the crops at high enough levels to pose a health danger. The risks were particularly pronounced for young children, who separate research has also shown also experience greater environmental exposure to the chemicals.

Higgins said in an interview that the findings underscore that regulators need to be looking at more than just drinking water limits for the chemicals in order to protect the public.

"Given that the focus has only been on drinking water, this definitely gives credence to the idea that you have the potential to have these other exposures and they're nontrivial if you're only treating the drinking water," Higgins said in an interview.

The research was partially funded with a grant from EPA, which has focused investment into PFAS research in recent years.

The context: Agricultural operations across the country have found their water supplies to be highly contaminated with the chemicals, and as the extent of contamination continues to come to light, more problems are likely to be found.

A farm in Colorado Springs, Colo., shut down several years ago after discovering its water had been contaminated with PFAS from firefighting foam used at the nearby Peterson Air Force Base. A dairy farmer in Clovis, N.M., dumped thousands of gallons a milk after discovering that the water he'd been feeding his animals had been contaminated with the chemicals by the nearby Cannon Air

Force base, and had transferred it into their milk. And remote communities in Alaska whose only access to fresh fruits and vegetables is what they grow themselves have struggled with whether it is better to grow crops with contaminated water or go without.

The policy fight: As part of last year's defense bill, lawmakers granted the Defense Department the authority to provide alternate water supplies to agricultural operations affected by PFAS contamination, despite opposition from the Trump administration. But the Pentagon has set a high bar for using that authority, saying in a memo last year that it would have to be proven that the contamination posed an unacceptable health risk before funds could be used.

The findings also have potential implications for EPA, which regulates biosolids — the sludge from wastewater treatment plants that is often spread as fertilizer onto farm fields.

Initial research presented by the Food and Drug Administration last year on the topic found that PFAS was detected in only a minority of the food that was sampled, although research focused on crops near contaminated sites did find the chemicals were transferring. In a June 2019 statement FDA's Deputy Commissioner for Food Policy and Response said that, "based on the best available current science, the FDA does not have any indication that these substances are a human health concern."

None of the agencies replied to a request for comment by deadline.

To view online:
https://subscriber.politicopro.com/energy/whiteboard/2020/11/study-crops-contaminated-with-pfas-can-pose-health-danger-3985381